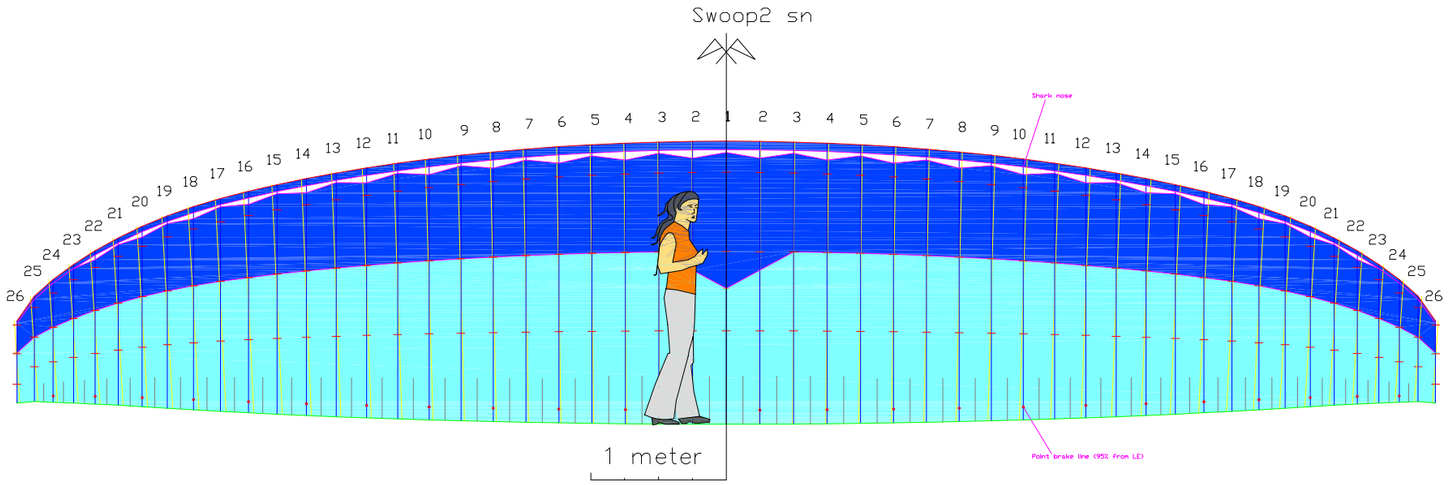
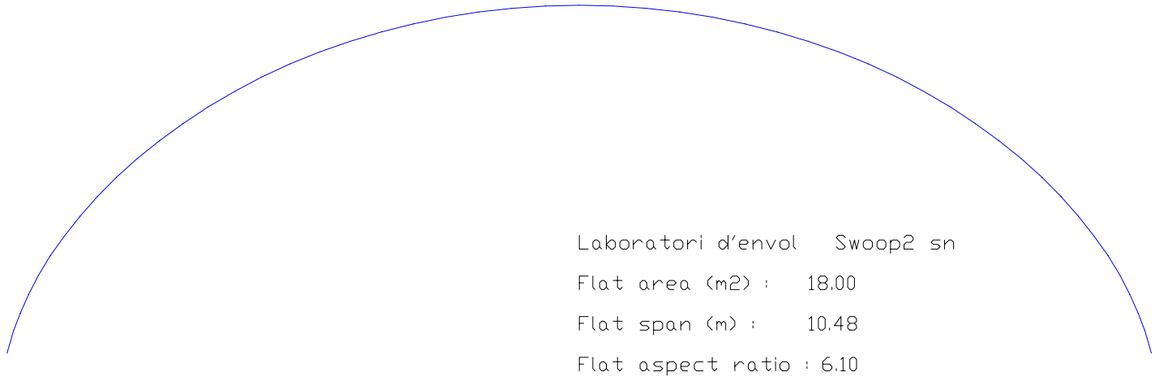




Laboratori d'envol Swoop2 sn

Flat area (m2) : 18.00

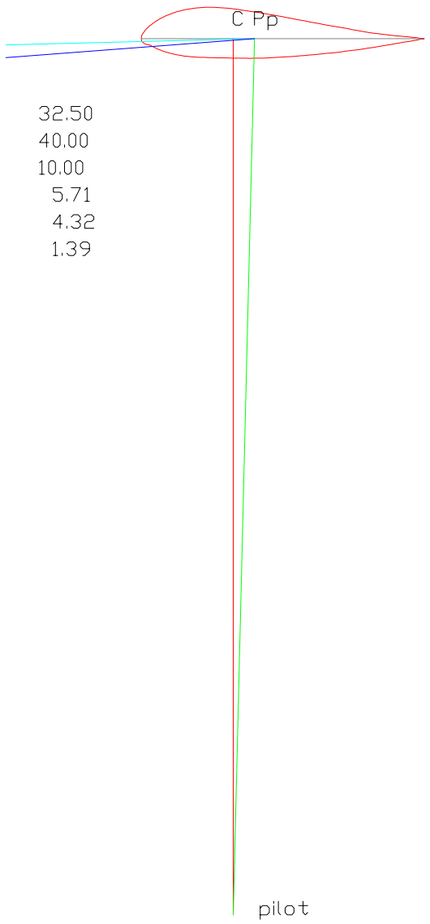
Flat span (m) : 10.48

Flat aspect ratio : 6.10

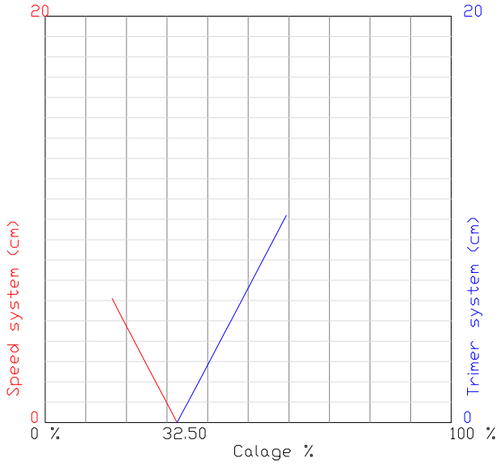
Cells number : 50

Edition date: 2026-11-22

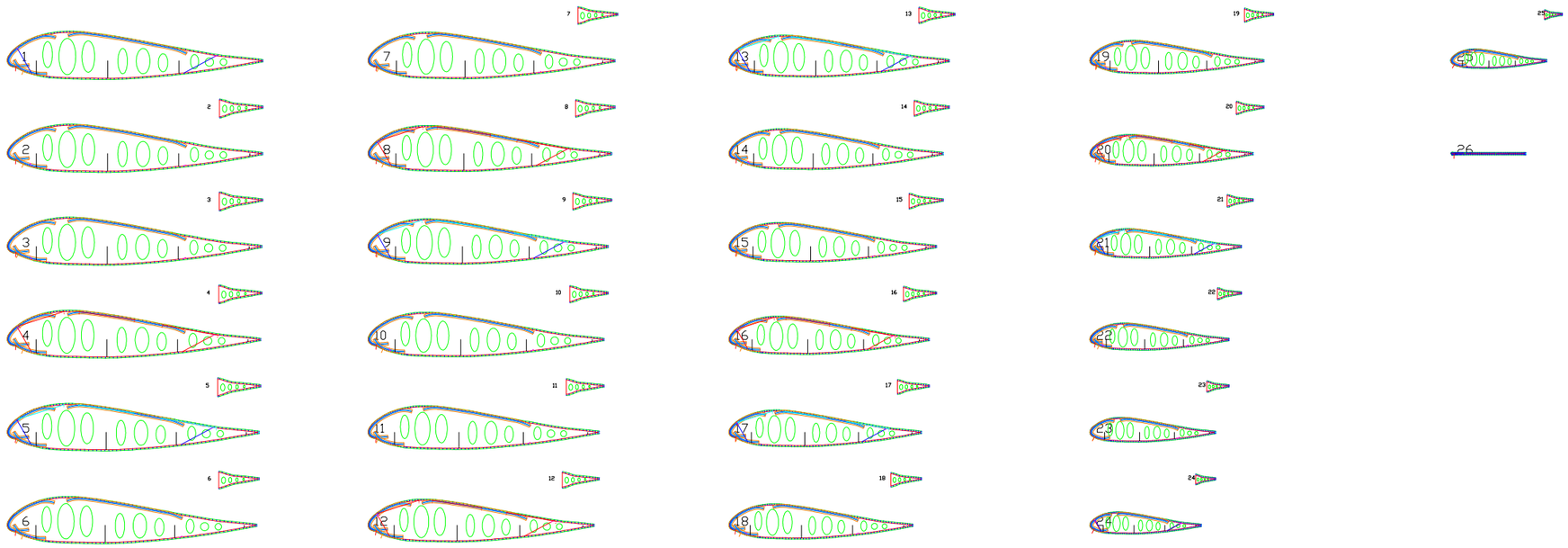
1-1 PLANFORM AND VAULT



calage=	32.50
plumb point=	40.00
glide ratio=	10.00
glide angle=	5.71
angle of attack=	4.32
assiette=	1.39

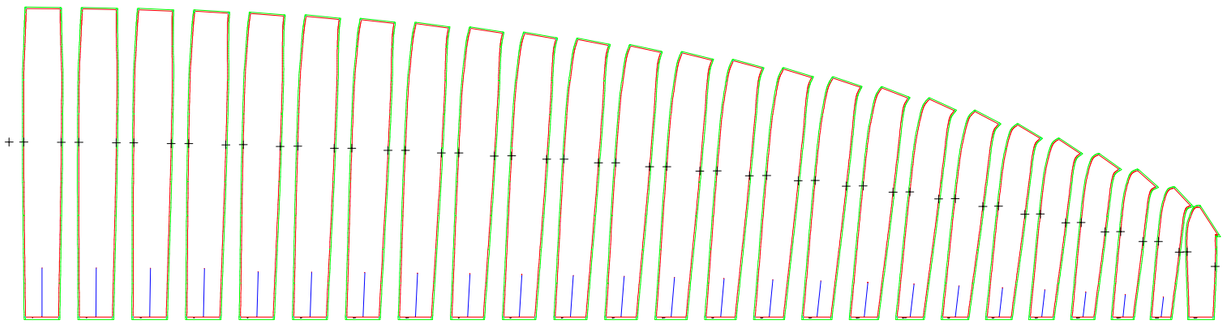


2-1 CALAGE ESTIMATION



1-2 RIBS

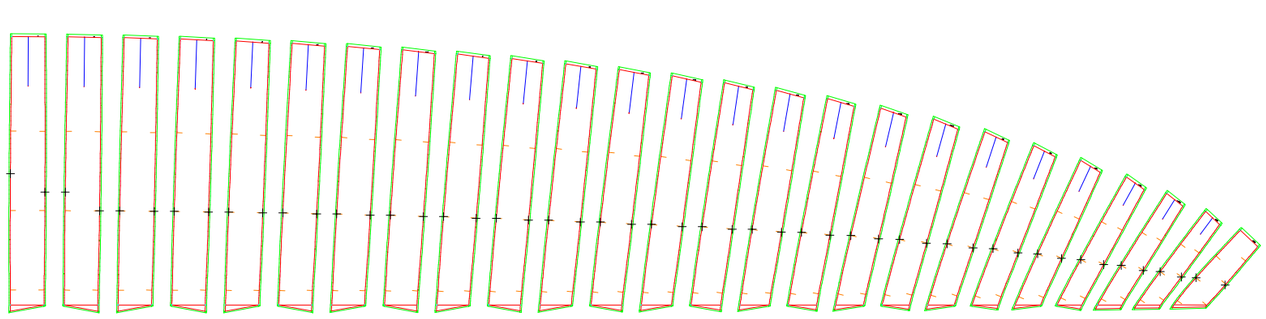
Leading edge



Trailing edge

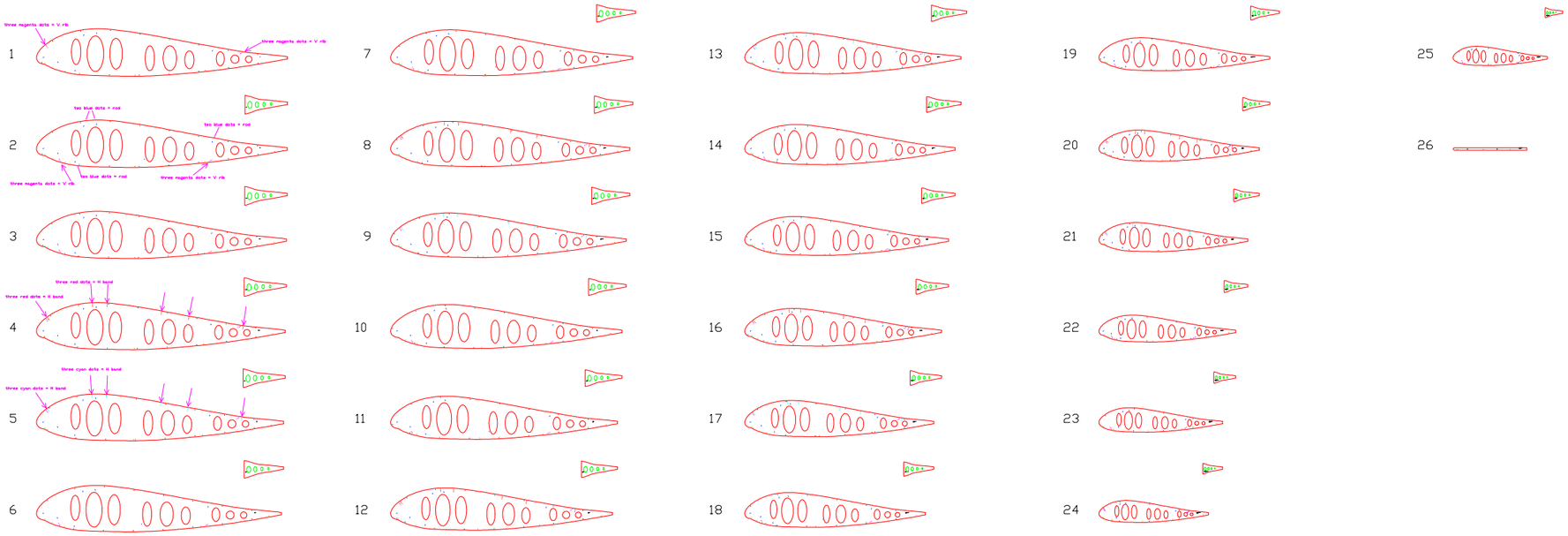
1-3 EXTRADOS PANELS

Trailing edge



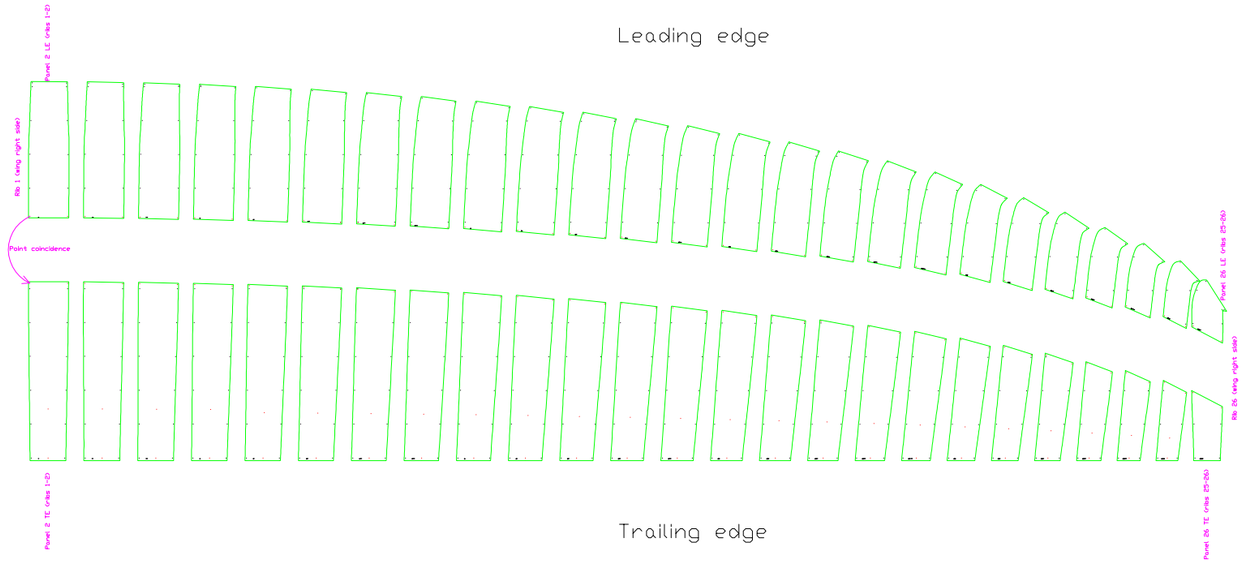
Leading edge

2-3 INTRADOS PANELS



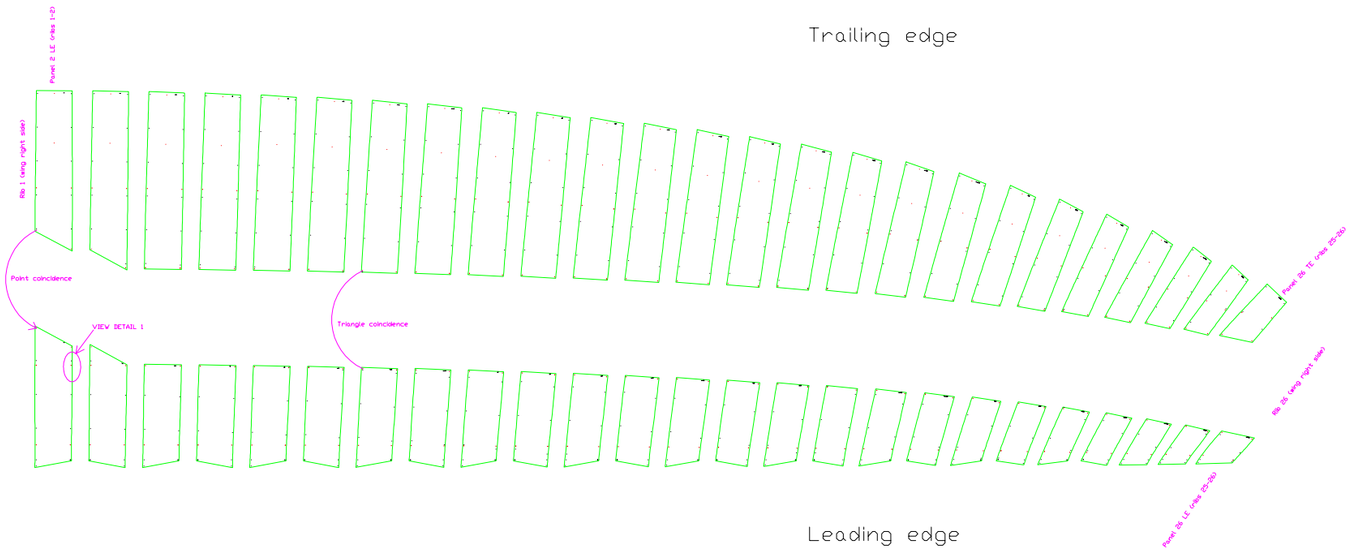
SCALE X 10 (cm to mm)

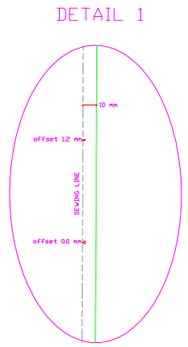
1-4 RIBS (FOR CUTTING TABLE)



SCALE X 10 (cm to mm)

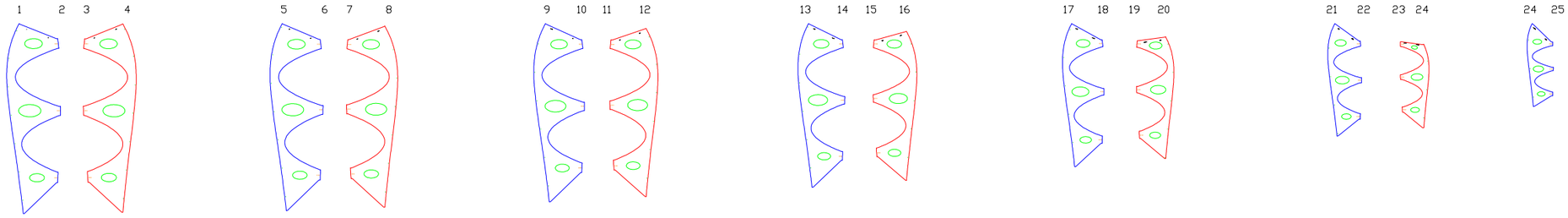
1-5 EXTRADOS PANELS (FOR CUTTING TABLE)





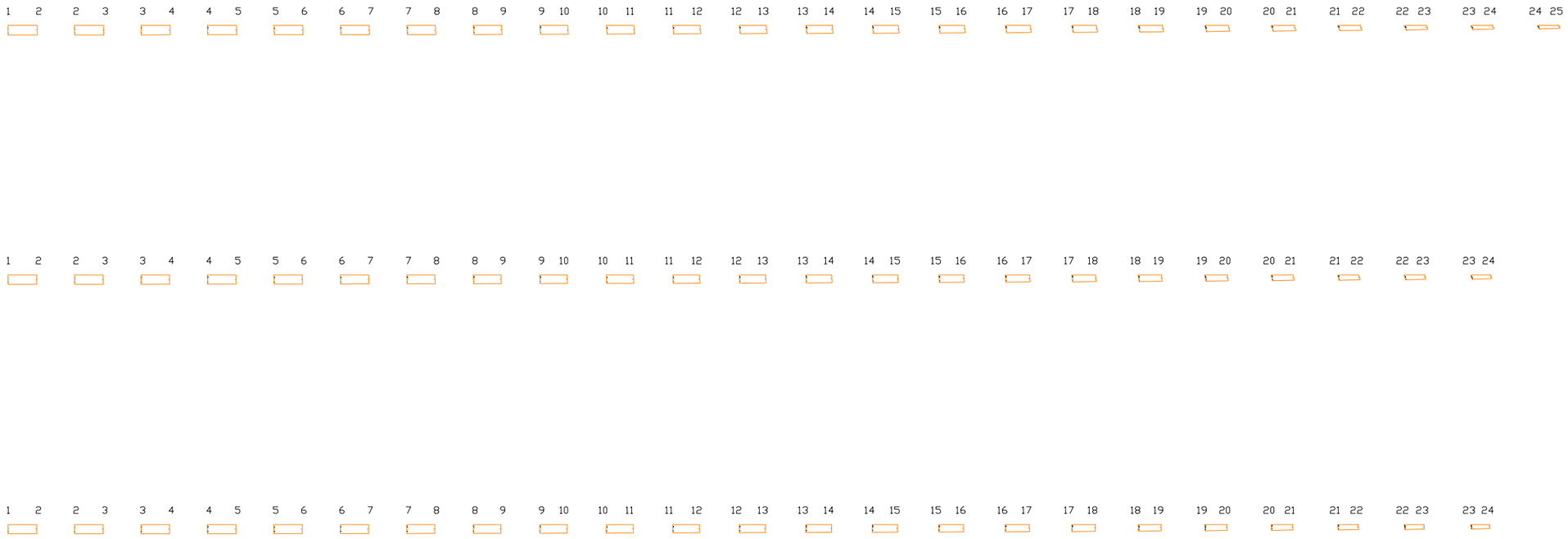
SCALE X 10 (cm to mm)

2-5 INTRADOS PANELS (FOR CUTTING TABLE)



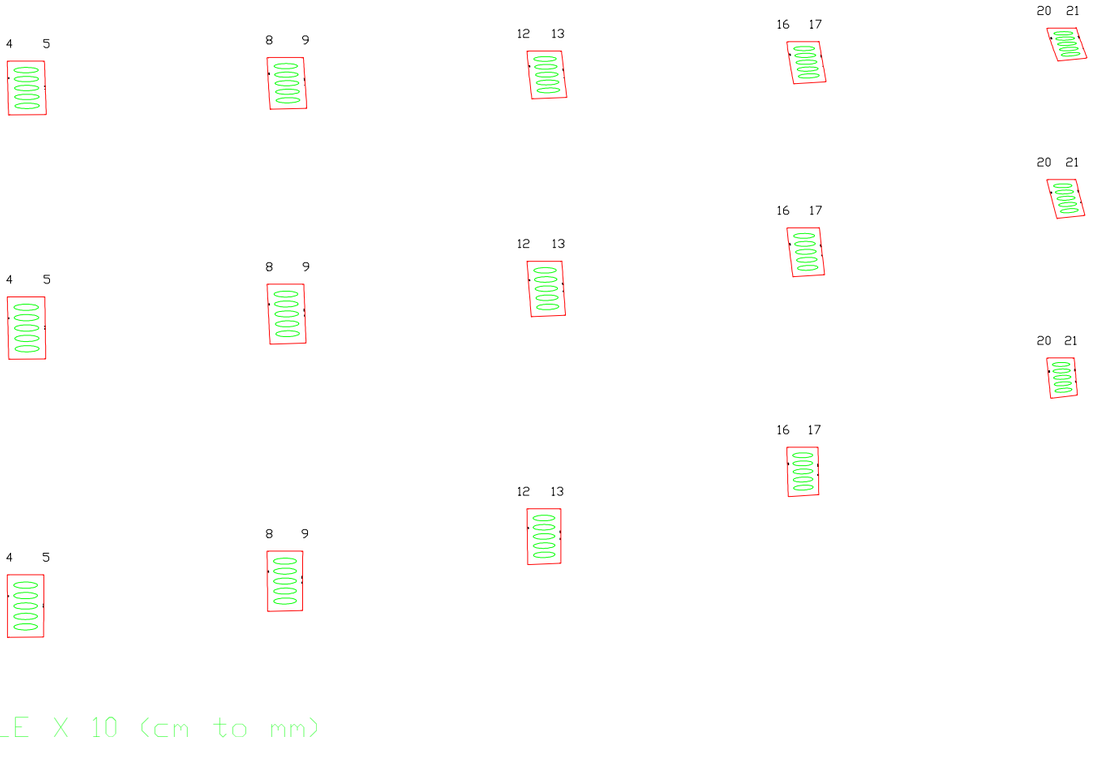
SCALE X 10 (cm to mm)

2-6 FULL DIAGONAL RIBS

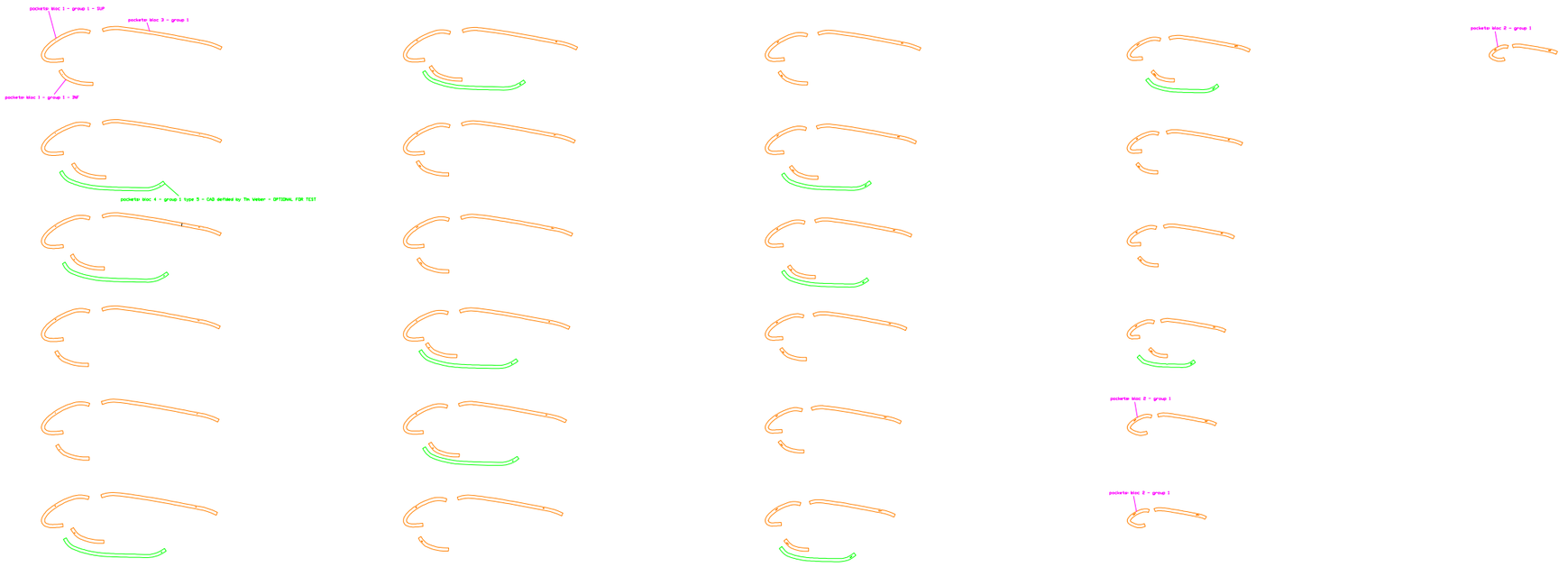


SCALE X 10 (cm to mm)

2-4 MINI-RIBS



3-6 V-rib Type-6



List of nylon rods (bloc 1)

Group 1					Group 1
Jonc	1	type 3	sup	66.2 inf	31.0
Jonc	2	type 3	sup	66.1 inf	30.9
Jonc	3	type 3	sup	65.9 inf	30.8
Jonc	4	type 3	sup	65.6 inf	30.7
Jonc	5	type 3	sup	65.1 inf	30.5
Jonc	6	type 3	sup	64.6 inf	30.2
Jonc	7	type 3	sup	63.9 inf	29.9
Jonc	8	type 3	sup	63.0 inf	29.5
Jonc	9	type 3	sup	62.1 inf	29.0
Jonc	10	type 3	sup	61.0 inf	28.5
Jonc	11	type 3	sup	59.8 inf	27.9
Jonc	12	type 3	sup	58.5 inf	27.3
Jonc	13	type 3	sup	57.0 inf	26.6
Jonc	14	type 3	sup	55.4 inf	25.8
Jonc	15	type 3	sup	53.6 inf	25.0
Jonc	16	type 3	sup	51.8 inf	24.1
Jonc	17	type 3	sup	49.8 inf	23.2
Jonc	18	type 3	sup	47.5 inf	22.1
Jonc	19	type 3	sup	44.9 inf	20.9
Jonc	20	type 3	sup	42.1 inf	19.6
Jonc	21	type 3	sup	39.1 inf	18.2
Jonc	22	type 3	sup	35.9 inf	16.6

SCALE X 10 (cm to mm)

List of nylon rods (bloc 2)

Jonc	23	type 1		40.4
Jonc	24	type 1		35.8
Jonc	25	type 1		30.8

1-6 NYLON RODS POCKETS, NOSE MYLARS

List of nylon rods (bloc 3)

Group 1				
Jonc	1	type 4		99.3
Jonc	2	type 4		99.2
Jonc	3	type 4		98.9
Jonc	4	type 4		98.4
Jonc	5	type 4		97.7
Jonc	6	type 4		96.9
Jonc	7	type 4		95.8
Jonc	8	type 4		94.6
Jonc	9	type 4		93.2
Jonc	10	type 4		91.5
Jonc	11	type 4		89.7
Jonc	12	type 4		87.7
Jonc	13	type 4		85.5
Jonc	14	type 4		83.1
Jonc	15	type 4		80.5
Jonc	16	type 4		77.7
Jonc	17	type 4		74.7
Jonc	18	type 4		71.3
Jonc	19	type 4		67.5
Jonc	20	type 4		63.2
Jonc	21	type 4		58.7
Jonc	22	type 4		53.8
Jonc	23	type 4		48.6
Jonc	24	type 4		43.0
Jonc	25	type 4		37.0

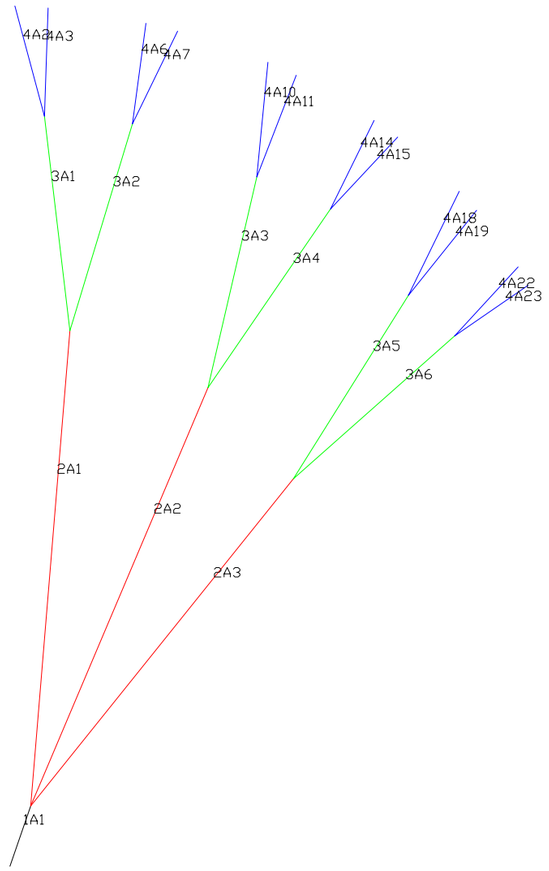
Bloc 4 defined only by CAD

Use pockets bloc 4

only in loaded ribs

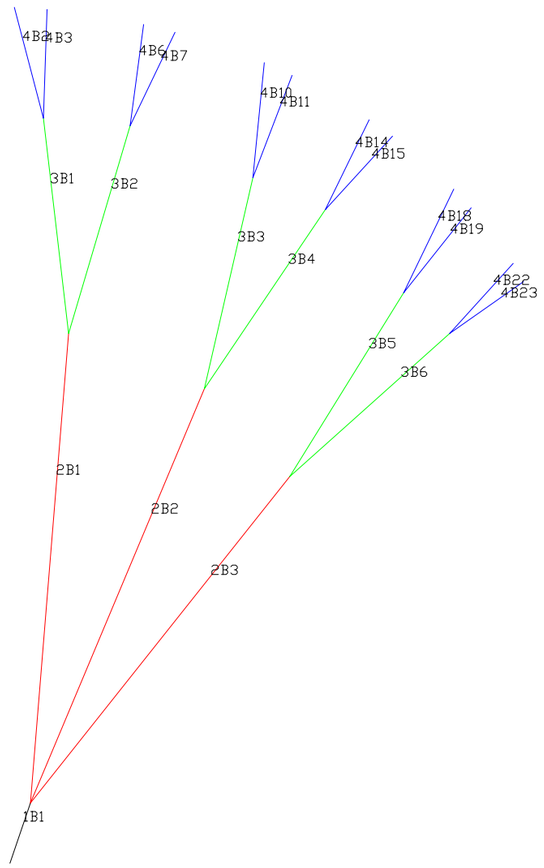
2,3,6.7.10,11,14,15,18,19,22

Line	Label	Length
1	1A1	47.0
2	2A1	352.9
3	2A2	335.9
4	2A3	309.9
5	3A1	159.9
6	3A2	159.9
7	3A3	159.9
8	3A4	159.9
9	3A5	160.0
10	3A6	160.0
11	4A2	84.7
12	4A3	80.2
13	4A6	75.1
14	4A7	76.3
15	4A10	85.4
16	4A11	80.7
17	4A14	73.0
18	4A15	72.6
19	4A18	85.8
20	4A19	80.6
21	4A22	69.5
22	4A23	66.9



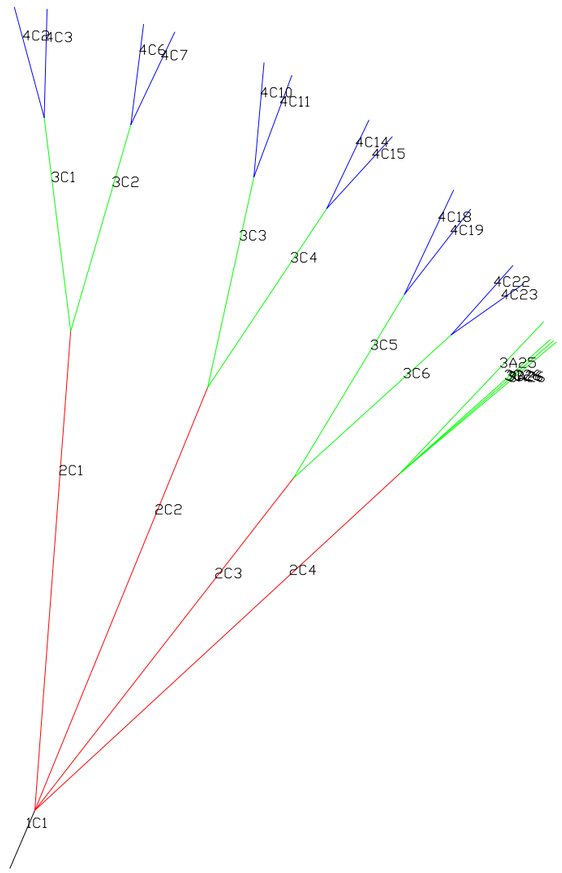
3-2 LINES A

Line	Label	Length
23	1B1	47.0
24	2B1	347.9
25	2B2	331.9
26	2B3	308.9
27	3B1	159.9
28	3B2	159.9
29	3B3	159.9
30	3B4	159.9
31	3B5	160.0
32	3B6	160.0
33	4B2	84.7
34	4B3	80.3
35	4B6	75.5
36	4B7	76.7
37	4B10	85.4
38	4B11	81.0
39	4B14	74.0
40	4B15	73.7
41	4B18	85.0
42	4B19	80.3
43	4B22	70.2
44	4B23	68.0



3-3 LINES B

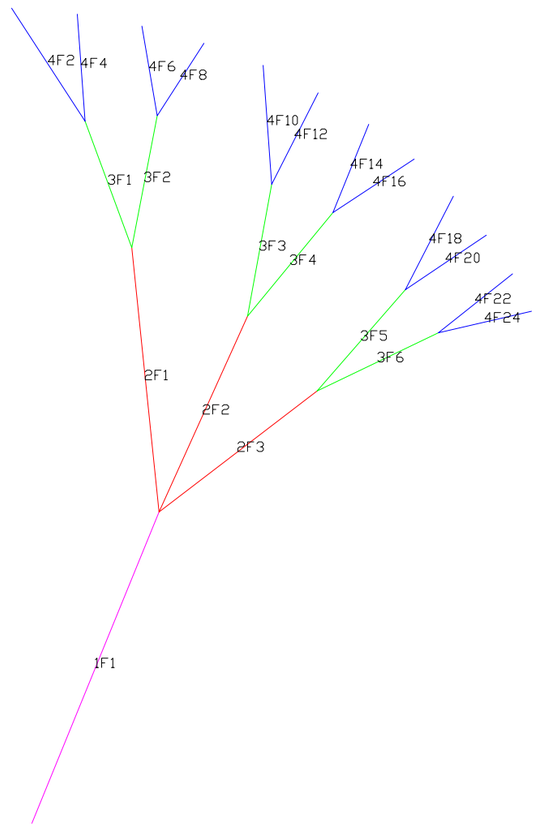
Line	Label	Length
45	1C1	47.0
46	2C1	356.9
47	2C2	340.0
48	2C3	314.0
49	2C4	370.0
50	3C1	160.0
51	3C2	160.0
52	3C3	160.0
53	3C4	160.0
54	3C5	160.0
55	3C6	160.0
56	3A25	154.3
57	3A26	151.5
58	3B26	153.8
59	3C26	159.2
60	4C2	84.9
61	4C3	80.4
62	4C6	75.1
63	4C7	76.1
64	4C10	85.1
65	4C11	80.5
66	4C14	72.7
67	4C15	72.2
68	4C18	85.4
69	4C19	80.5
70	4C22	69.2
71	4C23	66.5

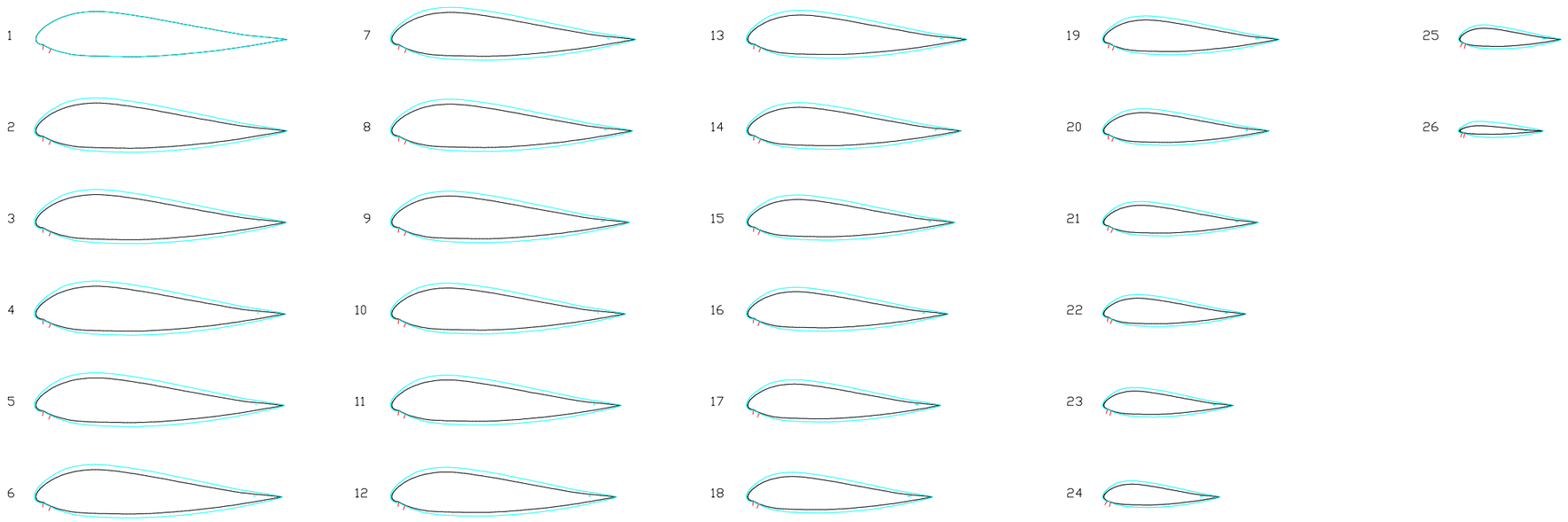


3-4 LINES C

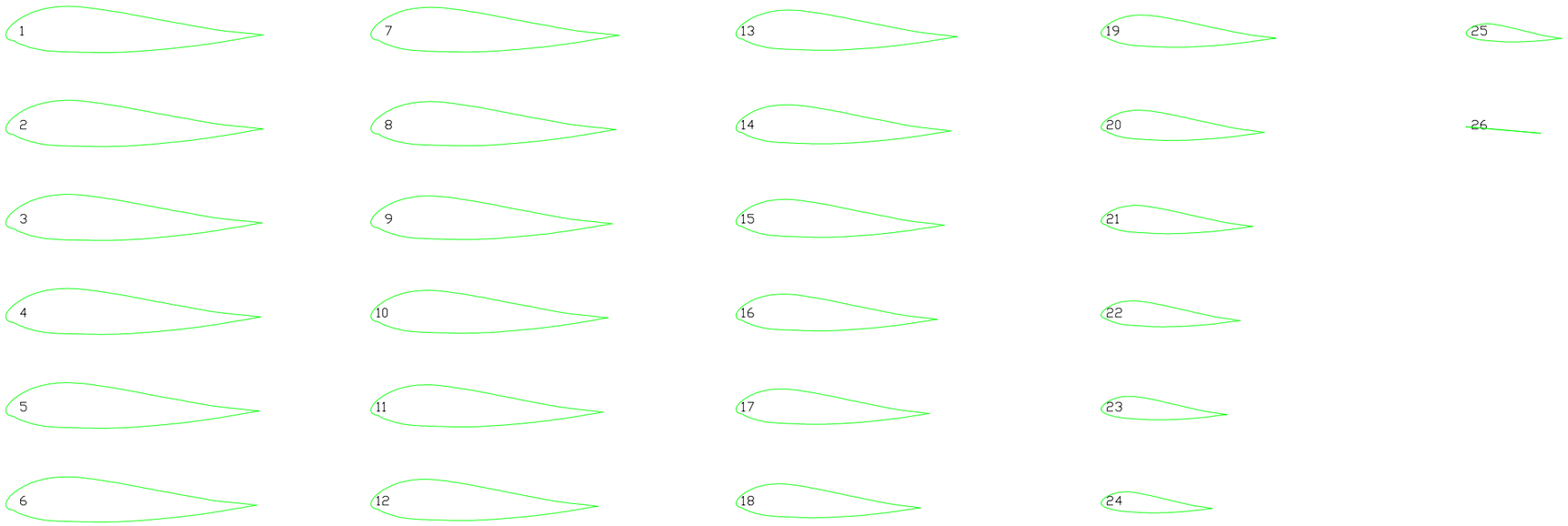
Line - Label - Length

72	1F1	254.0
73	2F1	200.0
74	2F2	162.0
75	2F3	150.0
76	3F1	101.0
77	3F2	101.0
78	3F3	101.0
79	3F4	101.0
80	3F5	101.0
81	3F6	101.0
82	4F2	100.7
83	4F4	80.6
84	4F6	68.4
85	4F8	64.9
86	4F10	89.5
87	4F12	77.4
88	4F14	71.8
89	4F16	73.0
90	4F18	79.1
91	4F20	73.4
92	4F22	71.3
93	4F24	71.9

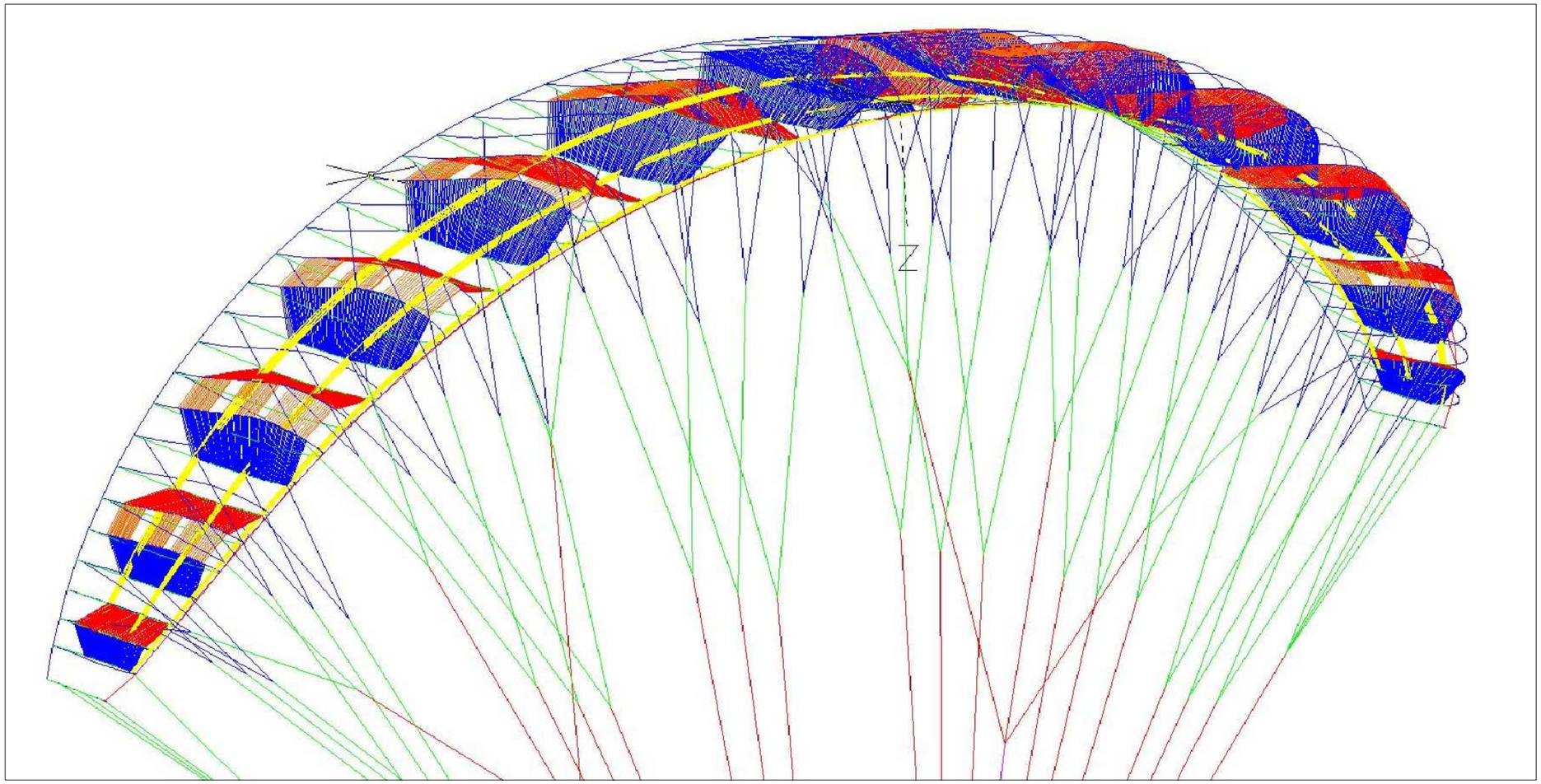




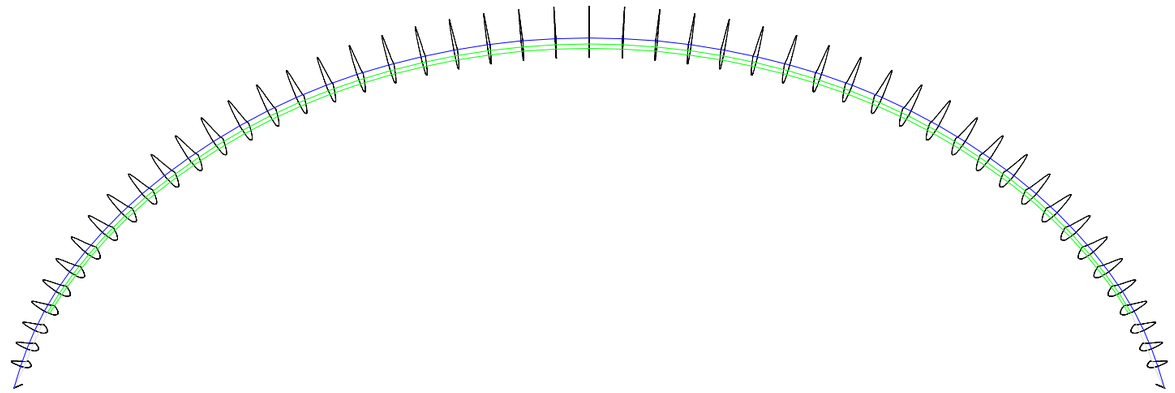
1-8 MIDDLE AND MIDDLE OVALIZED AIRFOILS



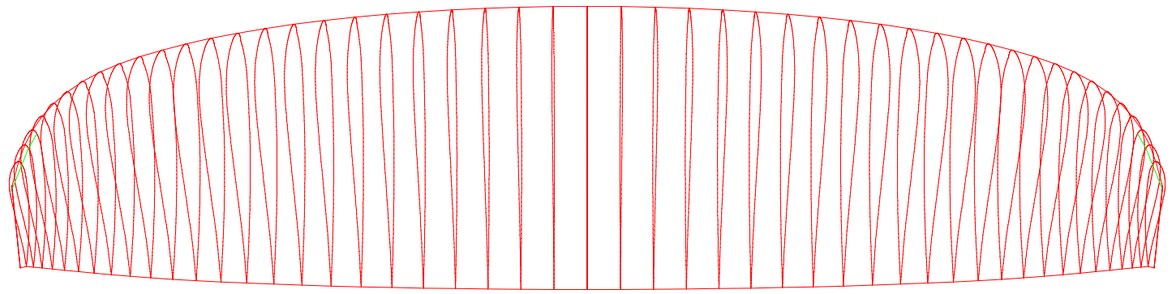
2-2 RIBS WASHIN ANGLE



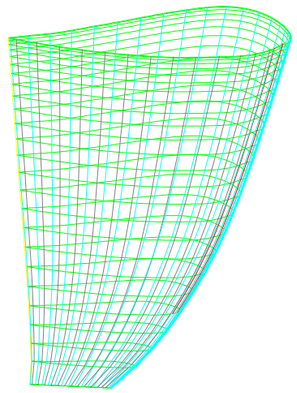
2-7 Internal structure



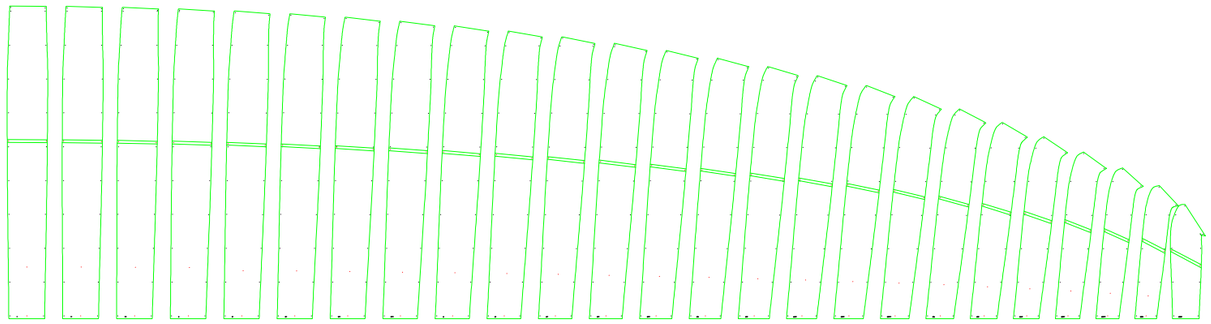
4-1 VAULT VIEW

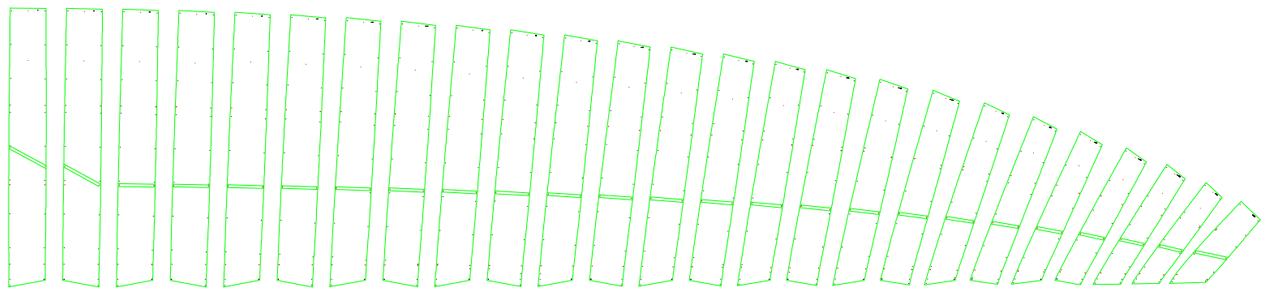


3-1 UPPER VIEW



4-2 LATERAL VIEW





3-7 EXTRADOS AND INTRADOS WITHOUT COLORS DIVISIONS



RECOMMENDED RIB REINFORCEMENTS (Swoop1)

PLANS GENERAL NOTES

1-1: Planform and vault view (informative)
1-2: Ribs for plotter, one side
1-3: Extrados panels for plotter, one side
1-4: Ribs for laser cutting, one side. Units cm
1-5: Extrados for laser cutting, one side.Units cm
1-6: Rods pockets and nylons lengths, mylars
1-7: Intermediate and ovalized airfoils

2-1: Calage estimation, speed and trim systems
2-2: Ribs printed with washin angle (informative)
2-3: Intrados panels for plotter, one side
2-4: Mini-ribs horizontal and diagonal
2-5: Intrados for laser cutting, one side
2-6: Full diagonal ribs laser, one side
2-7: Free

3-1: Upper view 3D (informative)
3-2: Lines A
3-3: Lines B
3-4: Lines C
3-5: Lines D
3-6: V-rib type-6
3-7: EXTRADOS AND INTRADOS WITHOUT COLORS DIVISIONS

4-1: Vault view (informative)
4-2: Lateral view (informative)
4-3: Brake distribution (informative)
4-4: Free
4-5: Brake lines
4-6: Free
4-7: General notes

UNITS

Main units are centimeters. Scale x10 to use in mm

WIDTHS FOR SEWING AND OFFSETS

Lateral width in extrados (mm): 10.00
Width in leading edge ex (mm): 10.00
Width in trailing edge ex (mm): 20.00
Lateral width in intrados (mm): 10.00
Width in leading edge in (mm): 10.00
Width in trailing edge in (mm): 20.00
Lateral width in ribs (mm): 10.00
Lateral width in V-ribs (mm): 10.00
General offset lateral points (mm): 1.20

Distance between equidistant points (cm): 25.00

"ROMAN" NUMBERS CODIFICATION
Numbering panels, ribs, mini-ribs, V-ribs

Number 1 = .
Number 2 = ..
Number 3 = ...
Number 4 = ...
Number 5 = :
Number 6 = :.
Number 7 = :..
Number 8 = :...
Number 9 = :....
Number 10 = ::
Number 11 = ::.
Number 12 = ::..
Number 13 = ::...
Number 14 = ::....
Number 15 = :::
Number 16 = :::.
Number 17 = :::..
Number 18 = :::...
Number 19 = :::....
Number 20 = ::::
Number 21 = ::::.
Number 22 = ::::..
Number 23 = ::::...
Number 24 = ::::....
Number 25 = :::::
Number 26 = :::::.